

# LE ZHANG

 Google Scholar |  Website |  GitHub |  LinkedIn |  Email

## EDUCATION

### Mila & Université de Montréal

Ph.D. in Computer Science

- ▶ Focus: Computer Vision and Multimodal Learning

Montreal, Canada  
Sep. 2022 – 2026 (exp.)

### Fudan University


Bachelor

Shanghai, China  
Sep. 2018 – June 2022

## PUBLICATIONS

† indicates co-first authorship

- **FROM WHERE THINGS ARE TO WHAT THEY ARE FOR: BENCHMARKING SPATIAL-FUNCTIONAL INTELLIGENCE** CVPR 2026  
Le Zhang, Jihan Yang, [...], Aishwarya Agrawal, Bo-Hsiang Tseng
- **REARANK: REASONING RE-RANKING AGENT VIA REINFORCEMENT LEARNING** EMNLP 2025 🏆 Oral  
Le Zhang†, Bo Wang†, Xipeng Qiu, Siva Reddy, Aishwarya Agrawal.  
 Paper  Model  Code
- **ASSESSING AND LEARNING ALIGNMENT OF UNIMODAL VISION AND LANGUAGE MODELS** CVPR 2025 🏆 Highlight  
Le Zhang, Qian Yang, Aishwarya Agrawal.  
 Paper  Project Page  Code
- **VISMIN: VISUAL MINIMAL CHANGE UNDERSTANDING** NeurIPS 2024  
Rabiul Awal†, Saba Ahmadi†, Le Zhang†, Aishwarya Agrawal.  
 Paper  Project Page  Code
- **ENHANCING THE PROTEIN TERTIARY STRUCTURE PREDICTION BY MSA GENERATION** NeurIPS 2024  
Le Zhang, Jiayang Chen, Tao Shen, Yu Li, Siqi Sun.  
 Paper  Code
- **INVESTIGATING PROMPTING TECHNIQUES FOR ZERO- AND FEW-SHOT VQA** NeurIPS 2024 Workshop  
Rabiul Awal, Le Zhang, Aishwarya Agrawal.  
 Paper
- **EXPLORING THE BEST PRACTICES OF QUERY EXPANSION WITH LLMs** EMNLP 2024 Findings  
Le Zhang†, Yihong Wu†, Qian Yang, Jian-Yun Nie.  
 Paper  Code
- **UNIFYING GRAPH CONVOLUTION AND CONTRASTIVE LEARNING IN COLLABORATIVE FILTERING** KDD 2024  
Yihong Wu, Le Zhang, Fengran Mo, Tianyu Zhu, Weizhi Ma, Jian-Yun Nie.  
 Paper
- **CONTRASTING INTRA-MODAL AND RANKING CROSS-MODAL HARD NEGATIVES** CVPR 2024  
Le Zhang, Rabiul Awal, Aishwarya Agrawal.  
 Paper  Code
- **MOQAGPT: ZERO-SHOT MULTI-MODAL OPEN-DOMAIN QA WITH LLMs** EMNLP 2023 Findings  
Le Zhang, Yihong Wu, Fengran Mo, Jianyun Nie, Aishwarya Agrawal.  
 Paper  Code
- **TREEMIX: COMPOSITIONAL CONSTITUENCY-BASED DATA AUGMENTATION FOR NLU** NAACL 2022 Oral  
Le Zhang, Zichao Yang, Diyi Yang.

 Paper  Code

- **SUBS: SUBTREE SUBSTITUTION FOR COMPOSITIONAL SEMANTIC PARSING**



NAACL 2022

Jingfeng Yang<sup>†</sup>, **Le Zhang<sup>†</sup>**, Diyi Yang.

 Paper

## MANUSCRIPTS

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- **Spectrum Matching: a Unified Perspective for Superior Diffusability in Latent Diffusion**  
Mang Ning, Mingxiao Li, **Le Zhang**, Lanmiao Liu, Matthew B. Blaschko, Albert Ali Salah, Itir Onal Ertugrul  
 Paper
- **INTRODUCING MILABENCH: BENCHMARKING ACCELERATORS FOR SCIENTIFIC DISCOVERY**  
**Le Zhang** et al.  Paper

## INVITED TALK

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- **REARANK: Reasoning Re-ranking Agent via Reinforcement Learning**  
Guest Research Talk at Microsoft Research Bangalore, 26 Sep 2025  Slides

## EXPERIENCE

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### Apple

Ph.D Intern

- ▶ Multimodal Agentic RL Post-Training

Sunnyvale, California, US

Feb 2026 – Aug 2026

### Apple

Ph.D Intern

- ▶ Agentic spatial reasoning benchmarking

Cupertino, California, US

July 2025 – Sep. 2025

### ServiceNow Research

Visiting Researcher

- ▶ GUI Agent via Reinforcement Learning.

Montreal, Canada

Feb. 2025 – July 2025

### SALT Lab

Summer Research Intern (Advisor: Prof. Diyi Yang)

- ▶ Proposed TreeMix, a novel compositional data augmentation method for NLU.

Remote

May 2021 – Sep. 2021

## SELECTED AWARDS

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- ▶ CVPR 2025 Outstanding Reviewer
- ▶ **Fonds de Recherche du Québec Doctoral Scholarship (FRQNT)** (100k CAD), 2025
- ▶ Scholarship for Accelerated Transition from Master's to Doctoral, 2023
- ▶ University of Montreal Excellence Scholarship, 2023, 2024
- ▶ Fudan University Outstanding Graduate Scholarship
- ▶ Huatai Securities Technology Scholarship (First Prize, Top 1%), 2021
- ▶ Fudan University Outstanding Student Scholarship (Second Prize), 2019 & 2022

## PROFESSIONAL SERVICE

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- ▶ **Reviewer:** \*Outstanding Reviewer

- ▶ CVPR ('24, '25\*, '26)
- ▶ NeurIPS ('24, '25)
- ▶ ICML ('25)
- ▶ ICLR ('26)
- ▶ ICCV ('25)
- ▶ ECCV ('24, '26)
- ▶ AAAI ('25)
- ▶ ACL ARR ('23, '24, '25, '26)

- ▶ WACV ('25)
- ▶ BMCV ('26)

- ▶ TMLR x2
- ▶ IEEE TIP

- ▶ **Teaching Assistant:** IFT 6765 - Links between Computer Vision and Language (Winter 2024)